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ABSTRACT

Self-concept is seen as constantly changing, being revised and updated rather than static and stagnant. Individuals are not born with self-concepts intact--an individual may accommodate characteristics that might influence the development of the self-concept, but the actual development is a learned process. This study investigated the self-concepts of 35 individuals diagnosed as chronic mentally ill. The independent variables investigated were duration of partial hospitalization, gender, diagnosis, and chronological age. The dependent variables employed were scores from 10 subscales of the Tennessee Self Concept Scale. The subscales were: physical self, moral-ethical self, personal self, family self, social self, self-criticism, identity, self-satisfaction, behavior, and total P scores (items measuring an individual's overall perception of self). Data were analyzed by testing four composite null hypotheses employing three way analysis of variance. The results appeared to support the following generalizations: (1) chronic mentally ill males possess a higher self-concept than females for family self, identity, and total P scores; (2) the longer the duration of partial hospitalization of the chronic mentally ill individuals, the lower the self-concept for physical self, personal self, family self, and behaviors; and (3) chronic mentally ill individuals 33 years and older have a higher self-concept than those individuals 32 years and younger. (Author/LLL)

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CHRONIC MENTALLY ILL: SELF-CONCEPT

being

A Thesis Presented to the Graduate Faculty
of the Fort Hays State University in
Partial Fulfillment of the Requirements for
the Degree of Master of Science

by

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Abstract

The purpose of the researcher was to investigate the self concepts of individuals diagnosed as chronic mentally ill. The independent variables investigated were duration of partial hospitalization, gender, diagnosis and chronological age. The dependent variables employed were scores from 10 subscales of the Tennessee Self Concept Scale. The subscales were: (1) physical self, (2) moral-ethical self, (3) personal self, (4) family self, (5) social self, (6) self criticism, (7) identity, (8) self satisfaction, (9) behavior and (10) total P scores. The Tennessee Self Concept Scale was administered to a group of 35 chronic mentally ill individuals at High Plains Mental Health Center. Data were analyzed by testing four composite null hypothesis employing three way analysis of variance (general linear model). One-hundred comparisons plus 130 recurring were made. Of the 100 comparisons made, 9 were statistically significant at the .05 level. The 9 statistically significant comparisons were for main effects. The significant main effects were for the independent variables gender with family self, identity, and total P; duration with physical self, personal self, family self, and behavior; and age with family self and behavior. The results of the present study appeared to support the following generalizations: (1) chronic

mentally ill males posses a higher self concept than females for family self, identity and total p; (2) the longer the duration of partial hospitalization of the chronic mentally ill individuals, the lower the self concept for physical self, personal self, family self, and behaviors; (3) chronic mentally ill individuals 33 years and older have a higher self concept than those individuals 32 years and younger and (4) diagnostic categories and self concept was not associated for any of the ten dependent variables.

Introduction

Felker (1974) described self-concept as:

> the sum total of the view which an individual has of himself. Self-concept is a unique set of perceptions, ideas, and attitudes which an individual has about himself. The view which an individual has of himself is unique and to varying degrees is different from the view that anyone else has about him. (p. 2)

The self-concept is seen as constantly changing, being revised and updated rather than static and stagnant. The self-concept is also universally seen as a learned characteristic (Felker, 1974). Individuals are not born with self-concepts intact. An individual may accommodate characteristics that might influence the development of the the self-concept, but the actual development is a learned process. Recognizing that the self-concept is a learned process, it is possible to view an individual's different learning outcomes more or less congruent of one's experiences.

Felker (1974) expanded on his definition by describing three aspects associated with the self-concept. Self-perceptions consist of an individual's unique reactions to smell, taste, sound, and actual feelings of the

environment and how these interactions help in the development of the self-concept. Felker (1974) went on to explain that the self-ideas which people have about themselves define who and what they are. These self-ideas are products of information which an individual receives from the environment and is thus incorporated into the whole set of self-referent ideas which the individual has developed. A third aspect of the individuals' perceptions of stimuli directed towards them from the environment. The ideas and internal thoughts are developed into attitudes which are then aimed at the self. Felker (1974) stated that:

> because self-attitudes are directed inward, the emotions aroused by these attitudes are particularly powerful. Everyone directs attitudes (emotionally toned ideas) towards others and, at the same time, perceives the attitudes of others toward them. External attitudes can be avoided if they are negative or painful. But negative self-attitudes cannot be avoided. (p. 5)

Frey and Carlock (1984) referred to self-esteem as, "the negative, positive, neutral ambiguous judgments that are placed on one's self-concept. People with high self-esteem respect themselves, consider themselves worthy and view themselves as equals with others" (p. 6). Coopersmith (1967), defined self-esteem as:

> the evaluation a person makes and customarily maintains with regard to himself or herself. "Self-esteem" expresses an attitude of approval or disapproval and indicates the extent to which a person believes himself or herself capable, significant, successful, and worthy. (p. 5)

"Self-esteem has been considered an important variable in determining behavior, adjustment, and happiness, with low esteem equating with behavioral problems, maladjustments and unhappiness" (Burns, 1979; Harter, 1983, as cited by Diedrick, 1986, p. 5). Van Der Velde (1985) stated that a major factor contributing to the development of maladaptive behaviors emanated from distorted images of one's self. Those low in self-esteem usually experience self-rejection, self-dissatisfaction, and self-disparagement (Frey & Carlock, 1984). Further examination of an insufficient self-concept revealed that if the development of the self-concept was interrupted or ceased altogether, lags in development will occur resulting in the absence of important phases that constituted the magnitude of its development. Will (1960) stated that:

> deviations of development resulting from experimental deficiencies or traumatic interferences with learning may be perpetuated from one era to the next, being only slightly changed or imperfectly corrected; the

> defect of growth in one era may interfere with progress in those that follow, leading to warps of personality that are in some instances then designated as "mental illness". (p. 198)

There are many reasons why individuals seek assistance for psychological problems. Among these individuals are the ones who are members of the chronically and profoundly disturbed population. Alyn and Becker (1984) described the characteristics of the chronically and profoundly disturbed population as multiple psychiatric hospitalizations, a predominance of affective and schizophrenic diagnosis/disorders, and more severe behavioral and functional disruption. Members of this population are also characterized by low self-esteem, learned helplessness, poor coping, inadequate problem-solving, and lack of self support skills (Knipe, 1978). Mechanic (1978) maintained that the lack of material resources, inadequate defenses, and inadequate social supports were other prominent dysfunctional characteristics of this population. Fenwick (1984) attempted to clarify chronic mental illness by defining it as:

> a person is disabled as a result of the condition for at least a two year period of time. That is, the person is severely impaired in his ability to function effectively in important areas of his life. Such areas include the ability to work and make a living,

> and being able to form and maintain normal social and familial relationships. The person may or may not have been hospitalized for the condition. (p.7)

Three commonly used classifications for chronic and profoundly disabled individuals are schizophrenia, depressive and miscellaneous. The first diagnosis, schizophrenia, was defined in the Diagnostic and Statistical Manual of Mental Disorders (DSM-III-R) (American Psychiatric Association, 1987) as follows:

> the essential features of this disorder are the presence of psychotic symptoms during the active phase of illness and functionally below the highest level previously achieved, and duration of at least 6 months that may include characteristics prodromal or residual symptoms. (p. 187)

The materials of DSM-III-R (The American Psychiatric Association, 1987) described some prominent characteristics of a schizophrenic individual as: (1) multiple, fragmented or bizarre delusions; (2) loosening of associations; (3) hallucinations; (4) loss of ego boundaries (e.g. the ability of an individual to feel unique and self-directed); and (5) impaired interpersonal relationships. The chronicity of this illness leaves the individual unable to function or maintain himself/herself adequately in society. Due to this impairment, the individual is usually placed in a

structured, supportive environment in which individuals are provided with: (1) a refuge, (2) "around-the-clock" support, comfort and understanding, (3) treatment-medication, therapy, and (4) protection from self-abuse (when the individual is in a disorganized deluded state) and from hurting others. Ciardiello and Bingham (1982) stated that, "the schizophrenic person has severe problems with self-esteem due to the dynamics of schizophrenia, family patterns, frequent hospitalizations and other stigmas of mental illness" (pp. 5-6).

Depression is classified as an affective disorder in the Diagnostic and Statistical Manual of Mental Disorders (DSM-III). "The essential feature is an illness involving either a manic episode or a major depressive episode. These major affective episodes are not diagnosed if the affective disturbance is due to an organic mental disorder or if it is superimposed on schizophrenia" (American Psychiatric Association, 1980, p. 218). Some characteristics associated with this diagnosis are: (1) loss of interest or pleasure in all or most activities, (2) appetite disturbance, change in weight, (3) sleep disturbance, and (4) feelings of worthlessness (American Psychiatric Association, 1987). An individual with a depressive personality often organizes identity in accordance with a bad self. Those individuals view themselves as inadequate, inept, with little worth and

value and sometimes even harmful. Storr (1983) postulated that "one of the most notable characteristics is the absence of an inner source of, or base for, self-esteem. This means that they remain dependent on outside sources for maintenance of self-esteem" (p. 432). Goldstein and Robert (1988) maintained that in order to feel decent about self, an individual must live up to certain difficult internalized aspirations, ideals and achievements in order to receive positive external feedback from others. They also proclaimed that individuals often seek out and form relationships where they can obtain this needed positive feedback. Individuals who display such psychopathology often receive psychological treatment voluntarily or involuntarily. Support programs and institutions are available that provide these individuals with continuous support, comfort, understanding and treatment.

Individuals who do not meet the criteria for a schizophrenic or depressive (affective) diagnosis may be grouped into the category miscellaneous. This grouping includes various diagnoses such as general anxiety disorders, adjustment disorders and personality disorders. Some common characteristics that are associated with this group are: (1) agitated gestures, talkative, (2) reckless activities (buying sprees, foolish business investments), (3) exaggerated emotions, often with elation or euphoria,

(4) excessive worry, and (5) repetitive motor acts (DiMascio & Goldberg, 1976). Anti-social behavior is viewed as another characteristic associated with this population. Anti-social behavior is considered as unacceptable conduct usually in violation of values, statutes and codes that reflect pervasive public policy, e.g., theft, property destruction and specific community standards, e.g., pornography, public drunkedness (Goldstone, as cited by Wolman, 1976).

Further investigation regarding the chronic mentally ill and their self-concept revealed two studies that cited results acknowledging the importance of the self-concept. In a study by Alyn and Becker (1984) involving 28 female patients enrolled in a partial hospitalization (Adult Day Treatment - ADT) program, significant improvement in self-esteem, as measured by the Tennessee Self-Concept Scale (TSCS), was produced. This study employed a form of the recurrent institutional cycle design. Campbell and Stanley (1963) described this strategy for field research as, "a given aspect of an institutional process is, on some cyclical schedule, continually being presented to a new group of respondents" (p. 57). The data analysis consisted of a one-way analysis of variance (ANOVA) with three levels of the repeated measure: T1, T2 and T3 (T = Time). The interval between T1, T2 and T3 was treated as the control period for this design. Throughout the time intervals,

each subject participated in regular A.D.T. programs. The programs included: support groups, recreational therapy, assertiveness training, primary psychotherapy groups and medication review and treatment. In addition to these programs, the women participated in a women's awareness group that focused on the enhancement of their self-esteem. Participation in the women's awareness group presented an overall improvement in self-esteem as measured by the total P scores of the TSCS ($F = 12.22$, $p < .001$).

Green (1986) conducted a study of 53 individuals diagnosed as chronic mentally ill. The instrument employed to assess self-concept was the Tennessee Self-Concept Scale. A status survey design was employed with the data analysis consisting of t-tests for single means and two-way analysis of variance (ANOVA). The following pertinent generalizations were supported by Green's (1986) study:

(1) the chronic mentally ill have a lower self-concept than the norm population,

(2) those individuals with a chronic personality disorder had a lower self-concept than the norm population,

(3) those individuals with a chronic schizophrenic disorder had a lower self-concept than the norm population,

(4) those individuals with a chronic affective

disorder had a lower self-concept than the norm population, and

(5) sex class membership had no effect on self-concept. (pp. 29-30)

To summarize, chronic psychiatric disorders refer to rigid patterns of behavior that are difficult to alter, are inadequate to provide individual satisfaction or competent social performance, involve a decline in morale and self-concept, and become such caricatures of human living that these individuals may not be accepted for long in many communities other than the hospital (Will, 1960). The majority of the research findings reviewed agreed that the self-concept was an essential factor in the development and the continuation of healthy individuals (Coopersmith, 1967; Alyn & Becker, 1984; Felker, 1974; Fitts & Hammer, 1969; Frey & Carlock, 1984). Watts and Po-Kwan (1976) maintained that self-esteem was a powerful measure of the rehabilitation potential of schizophrenic individuals. Because of the chronic individual disability, low self-concept inhibits the individual's participation in learning tasks, ability to provide self-support outside a structured organization, and the maintenance of a distorted self-concept through maladaptive behaviors. Wing (1978) suggested that the chronic individual emits a lower self-concept for reasons of: (1) becoming accustomed to institutional life, (2) becoming accustomed to the label as

a chronic mental patient, and (3) having little motivation to try to improve. Because of this deviant and maladaptive self-concept held by the chronic mentally ill individual, treatment to correct this impairment is a process of retraining.

> To disrupt the pattern in the majority of chronic patients, they must be part of a treatment program which does not merely intrude and temporarily revise or submerge behavior, but which is continuous and progressive for years after the gross hospital phase of this illness. (Scher, 1962, p. 189)

To reiterate, temporary programs to enhance the self-concept of chronic individuals are not enough. A structured milieu accompanied with the intrusion of the chronic individual's life-style along with a long-term period of gradual and progressive therapy may hopefully lead to a more positive and fruitful period of treatment for the chronic mentally ill individual.

Statement of Problem

The purpose of the researcher was to investigate the self concepts of individuals diagnosed as chronic mentally ill. The independent variables were: duration of partial hospitalization, gender, diagnosis, and chronological age.

Importance of the Research

This study provided current information pertaining to

the chronic mentally ill and their self-concept. The researcher postulated that the information could be helpful in mental health institutions, e.g., to promote further therapeutic interactions, thus facilitating patient's self-concept. In addition, the results of this research could be helpful to other institutions which deal directly with this population. Some institutions which may utilize these results are vocational rehabilitation services and educational facilities. In summation, the results of this exploratory study would illustrate the self-concept of chronic mentally ill individuals. The results of this study provided information pertaining to the following questions:

(1) Is there an association between the duration of partial hospitalization and self-concept scores?

(2) Is there an association between gender and self-concept scores?

(3) Is there an association between the diagnostic categories and self-concept scores?

(4) Is there an association between chronological age and self-concept scores?

Composite Null Hypotheses

All null hypotheses were tested at the .05 level of significance.

(1) The differences among the mean self-concept scores according to duration of partial hospitalization,

gender, and diagnostic categories will not be statistically significant.

(2) The differences among the mean self-concept scores according to gender, diagnostic categories and chronological age will not be statistically significant.

(3) The differences among the mean self-concept scores according to duration of partial hospitalization, gender and chronological age will not be statistically significant.

(4) The differences among the mean self-concept scores according to duration of partial hospitalization, diagnostic categories and chronological age will not be statistically significant.

Definition of Variables

Independent Variables

Duration of partial hospitalization, gender, diagnosis, and chronological age were the independent variables. This information was obtained from the records and files of the clients. The variables were:

(1) Duration of partial hospitalization- three levels

A. 0-1 year

B. 1.1-2 year

C. 2.1 years or more

(2) Gender- two levels

A. male

B. female

(3) Diagnosis- three levels

A. schizophrenia

B. depressive

C. miscellaneous

(4) Chronological age- two levels

A. 32 years or less

B. 33 years and above

Dependent variables

Self-concept was determined by 10 subscale scores of the Tennessee Self Concept Scale. The subscales (Fitts, 1965) employed were:

(1) physical self--the individual's perception of his/her appearance, skills, and sexuality;

(2) moral-ethical self--the individual's perception of self as "good" or "bad";

(3) personal self--the individual's perception of personal worth and adequacy as a person;

(4) family self--reflects the individual's perceptions of adequacy, worth, and value as a family member;

(5) social self--reflects the individual's perception of adequacy and worth in social interactions;

(6) self-criticism--an individual's openness to negative self-evaluation;

(7) identity--an individual's perception of self;

(8) self satisfaction--how the individual accepts the self he/she perceives;

(9) behavior- an individual's perception of the behavior he/she emits; and

(10) total P scores--an individual's overall perception of self.

Limitations

The following could have affected the outcome of this study:

(1) the subjects were not randomly assigned,

(2) all subjects used were clients from one mental health center, and

(3) the majority of subjects were from one geographical location in the Midwest.

Methodology

Subjects

The subjects consisted of 35 participants of a partial hospitalization and supportive housing program located at a community health center in northwest Kansas. This program is focused towards the treatment of the chronic mentally ill. The clients interact with staff frequently through case management and medical supervision. The program also assists the clients in the collection of benefits available to them through social rehabilitation services (SRS). All subjects employed met the criteria for

a chronic mentally ill diagnosis.

Of this sample, 22 were male and 13 were female. Eighteen subjects were diagnosed as schizophrenic, 9 were diagnosed as depressive, and 8 fell under the miscellaneous diagnosis. In reference to the duration of partial hospitalization, 21 ranged from 0-1 year, 5 ranged between 1.1 - 2 years, and 9 ranged form 2.1 years or more. In reference to chronological age, 20 were 32 or below and 15 were 33 or above.

Instrument

The instrument used to assess self-concept was the Tennessee Self Concept Scale (TSCS). This scale was developed by Fitts (1965) to assess an individual's feelings of self worth, the degree to which the self-image is realistic, and whether or not that self-image is a deviant one (Walsh, 1987). The scale is available in two forms; the clinical and research form and the counseling form. The researcher employed the clinical and research form for this investigation. The TSCS is a Likert-type scale comprised of 100 self-descriptive statements that reflect one's self-concept. The 10 subscales from the clinical and research form that were used as dependent variables were, (Fitts, 1965, as cited by Walsh, 1987): (1) physical self--items measured the individual's perception of his/her appearance, skills, and sexuality;

(2) moral-ethical self--items measure the individual's perception of self as "good" or "bad"; (3) personal self--items measured an individual's feelings of personal worth and adequacy as a person; (4) family self--items reflected the individual's feelings of adequacy, worth, and value as a family member; (5) social self--items reflected the individual's perception of adequacy and worth in social interactions; (6) self-criticism--items measured an individual's openness for negative self-evaluation; (7) identity--items measured an individual's perception of self; (8) self satisfaction--items measured how the individual accepts the self he/she perceives; (9) behavior--items measured an individual's perception of the behavior they emit; and (10) total P scores--items measured an individual's overall perception of self. The norms for the TSCS were established from the responses of 626 people who varied in age from 12 to 68 years (Walsh, 1987). This sample represented variation in geographical locations in the United States, gender (approximately 50% male, 50% female), intellectual levels of functioning, racial diversity, and social and economic status.

The test-retest reliability coefficients for all major scores have been found to range between .60 to .92 (Fitts, 1965, as cited by Green, 1986). The major scores (Fitts & Hammer, 1969) are:

(1) Positive scores: The overall self-concept is

reflected in Total Positive Score which indicates the person's general level of self-esteem.

(2) Variability Scores: In the emotionally healthy individual, the self-concept should be not only positive but consistent across its several dimensions.

(3) Distribution Scores: Scores are representing the number of times the individual uses each response category and these scores reflect the manner in which the individual handles the task of self-description.

(4) Self Criticism: This is a measure of an individual's openness to admit derogatory things about the self and is based upon the MMPI lie scale.

(5) True/False Ratio: This is a simple ratio of true and false responses used to produce interesting and valuable data.

(6) Conflict Scores: Self-appraising statements that may be couched in either positive or negative terms.

(7) Empirical Scales: The scales that are most important are the General Maladjustment Scale (GM) and the Personality Disorder Scale (PD). Others are the Psychosis Scale (PSY), the Neurosis Scale (N), the Defensive Positive Scale (DP), and the Personality Integration Scale (PI). (pp. 2-5)

The reliability coefficients for deviant responses of

the various profile segments range from .80 to .90. Fitts (1965, as cited by Walsh, 1987) cited the validity procedures as:

(1) Discriminations between groups: Items were selected for given scales on the basis of distinguishing members of one criterion group from those of all others. Six criterion groups were used: psychotics (n = 100); neurotics (n = 100); subjects with diagnosed personality disorders (n = 100); subjects labeled "defensive positive" (n = 100); and subjects comprising the general norm group (n = 626).

(2) Correlations with other personality measures: Fitts (1965) presented correlations between the TSCS and the MMPI, the Edwards Personal Preference Schedule (pp. 504, 508).

Design

A status survey design was employed. The independent variables investigated were duration of partial hospitalization, gender, diagnosis and chronological age. The dependent varibles employed were scores from ten subscales of the Tennessee Self Concept Scale. The subscales were: (1) physical self, (2) moral-ethical self, (3) personal self, (4) family self, (5) social self, (6) self criticism, (7) identity, (8) self satisfaction, (9) behavior and (10) total p scores. The Tennessee Self Concept Scale was administered to a group of 35 chronic

mentally ill individuals at High Plains Mental Health Center. Data were analyzed by testing four composite null hypothesis employing three-way analysis of variance (general linear model). The design for each composite null hypotheses was as follows:

(1) a 3 x 2 x 3 factorial was employed;

(2) a 2 x 3 x 2 factorial was employed;

(3) a 3 x 2 x 2 factorial was employed; and

(4) a 3 x 3 x 2 factorial was employed.

The following describes measures taken by the researcher to deal with the threats to internal and external validity. The list of threats to internal and external validity were taken from McMillan and Schumacher (1984), (1989) and Campbell and Stanley (1963). The threats to internal validity were:

(1) History--did not apply because the present study was status survey.

(2) Selection--random sampling was not employed. The researcher enlisted clients from a partial hospitalization program as subjects. The subjects were all from the same mental health facility. All subjects who met criteria participated.

(3) Statistical regression--did not apply because the present study was status survey.

(4) Instrumentation--did not apply because the present

study was sttus survey.

(5) Testing--The same set of recorded items were administered to all subjects.

(6) Mortality--All subjects present were tested.

(7) Maturation--did not apply. The present study was status survey.

(8) Experimenter Bias--The same set of recorded items were administered to all subjects. The present study involved no treatment.

(9) Diffusion of treatment--did not pertain in present study because no treatment was implemented.

(10) Statistical Conclusions--Two mathematical assumptions of the statistical procedure were violated, random placement and equal number in cells. The general linear model was employed to adjust for different number in cells. The researcher did not project beyond the statistical procedure employed.

The threats to external validity were:

(1) Population external validity--Ransom sampling was not employed; therefore, the results should be generalized only to individuals with similar diagnosis who participate in a partial hospitalization program in a similar institution.

(2) Ecological external validity--The subjects completed the TSCS in their normal physical surroundings. The subjects were given the assessments under relaxed

conditions. The subjects were comfortable with the researcher due to previous interactions.

Data Collecting Procedures

A proposal was submitted to the review committee at High Plains Mental Health Center, Hays, Kansas, for permission to conduct research at their facility (Appendix A). The director of the partial hospitalization and supportive housing program was contacted concerning appropriate times for the research to be conducted (Appendix B).

The research study was explained and directions read to all subjects stressing that the results pertaining to the individual would be kept completely confidential, thus assuring the individuals of their right to privacy (Appendix C). The subjects who agreed to participate signed a consent form (Appendix D). The TSCS was administered by the researcher to one group at the mental health center where the subjects attended a partial hospitalization program. The questions were recorded on tape prior to the administration of the TSCS. The questions were recorded to assist in the administration of the scale due to the subject's possible impairment in reading the questions or comprehending the questions. The questions were recorded twice and then played back to the subjects one question at a time. The recorder was turned

off between questions in order to provide ample time for subject to circle their response. Questions were repeated upon request. Answer sheets were then collected and prepared for the computing center.

Research Procedure

The researcher reviewed literature related to self-concept and chronic mental illness. A research plan was developed. The review of related research began with a computer search at Forsyth Library. Information was also acquired from the High Plains Mental Health Center Library, the Records and Research office at High Plains Mental Health Center, and from an associate's personal library. The information was examined and integrated. An instrument was chosen, hypotheses were written, and a method for testing was selected. Based upon this, a proposal was written and submitted to the thesis committee and defended.

Data were collected and then analyzed by the computing center at Fort Hays State University. The results were analyzed, presented and a discussion were written. A final report was compiled and defended. Editing of final report was completed.

Data Analysis

The following data were compiled:

(1) descriptive statistics,

(2) three way analysis of variance (general linear model),

(3) Bonferroni (Dunn) *t*-test for means, and

(4) Duncan's multiple range test for means

Results

Summary

The purpose of the researcher was to investigate the self concepts of individuals diagnosed as chronic mentally ill. The independent variables investigated were duration of partial hospitalization, gender, diagnosis and chronological age. The dependent variables employed were scores from 10 subscales of the Tennessee Self Concept Scale. The subscales were: (1) physical self, (2) moral-ethical self, (3) personal self, (4) family self, (5) social self, (6) self criticism, (7) identity, (8) self satisfaction, (9) behavior and (10) total p scores. The Tennessee Self Concept Scale was administered to a group of 35 chronic mentally ill individuals at the High Plains Mental Health Center. Data were analyzed by testing four composite null hypothesis employing three-way analysis of variance (general linear model). The design for each composite null hypothesis was as follows:

composite null hypothesis number one a 3x2x3 factorial design,

composite null hypothesis number two a 2x3x2 factorial design,

composite null hypothesis number three a 3x2x2 factorial design and

composite null hypothesis number four a 3x3x2 factorial design.

The results section was organized according to the composite null hypotheses for ease of reference. Information pertaining to each null hypothesis was

presented in a common format.

It was hypothesized in composite null hypothesis number one that the differences among the mean self concept scores according to duration of partial hospitalization, gender and diagnostic categories would not be statistically significant. Table 1 contains variables, sample sizes, means, standard deviations, F values, and probability levels.

Table 1

A Comparison of Mean Self Concept Scores According to Duration of Partial Hospitalization, Gender and Diagnostic Categories Employing a Three-Way Analysis of Variance

Variable	n	M	SD	F value	p value
		Identity			
Duration (A)					
0-1 year	21	108.3*	19.64		
1-2 years	5	101.6	14.64	0.50	.6144
More than 2 years	9	99.0	16.48		
Gender (B)					
Female	13	97.8	17.94	1.92	.1781
Male	22	109.1	17.53		
Diagnostic (C)					
Schizophrenia	18	107.8	19.33		
Depressive	9	103.9	20.58	0.94	.4055
Miscellaneous	8	99.8	13.32		
		Interactions			
		A x B		**	**
		A x C		0.21	.8137
		B x C		0.30	.5911
		A x B x C		**	**

(continued)

Table 1 (continued)

Variable	n	M	SD	F value	p value
		Self-Criticism			
Duration (A)					
0-1 year	21	31.6	5.02		
1-2 years	5	32.8	4.60	0.22	.8079
More than 2 years	9	35.2	5.07		
Gender (B)					
Female	13	32.3	4.77	1.00	.3285
Male	22	33.0	5.35		
Diagnostic (C)					
Schizophrenia	18	34.4	5.10		
Depressive	9	31.7	4.12	2.54	.1000
Miscellaneous	8	30.0	5.01		
		Interactions			
		A x B		**	**
		A x C		1.68	.2080
		B x C		1.23	.2779
		A x B x C		**	**
		Behavior			
Duration (A)					
0-1 year	21	101.8	16.75		
1-2 years	5	95.6	13.13	.79	.4638
More than 2 years	9	91.8	12.57		

(continued)

Table 1 (continued)

Variable	n	M*	SD	F value	p value
Gender (B)					
Female	13	94.9	13.03	0.37	.5474
Male	22	100.3	16.85		
Diagnostic (C)					
Schizophrenia	18	99.7	18.26		
Depressive	9	98.9	14.65	0.33	.7241
Miscellaneous	8	94.6	10.04		
		Interactions			
		A x B		**	**
		A x C		0.18	.8325
		B x C		0.51	.4804
		A x B x C		**	**
		Self-Satisfaction			
Duration (A)					
0-1 year	21	62.5	9.01		
1-2 years	5	62.4	6.35	1.87	.1755
More than 2 years	9	56.1	6.70		
Gender (B)					
Female	13	59.0	6.81	1.06	.3134
Male	22	62.0	9.23		
Diagnostic (C)					
Schizophrenia	18	61.2	9.22		
Depressive	9	61.4	8.62	0.88	.4265
Miscellaneous	8	59.5	7.15		

(continued)

Table 1 (continued)

Variable	n	M*	SD	F value	p value
		Interactions			
		A x B		**	**
		A x C		0.55	.5833
		B x C		1.35	.2561
		A x B x C		**	**
		Moral Ethical Self			
Duration (A)					
0-1 year	21	64.0	10.27		
1-2 years	5	56.4	13.03	0.89	.4248
More than 2 years	9	60.1	4.94		
Gender (B)					
Female	13	60.0	10.08		
				0.29	.5981
Male	22	63.1	9.67		
Diagnostic (C)					
Schizophrenia	18	63.3	9.14		
Depressive	9	61.6	13.13	0.38	.6892
Miscellaneous	8	59.4	7.31		
		Interactions			
		A x B		**	**
		A x C		0.30	.7442
		B x C		0.22	.6424
		A x B x C		**	**

(continued)

Table 1 (continued)

Variable	n	M*	SD	F value	p value
		Personal Self			
Duration (A)					
0-1 year	21	64.2	8.38		
1-2 years	5	61.0	7.58	0.48	.6219
More than 2 years	9	56.8	8.93		
Gender (B)					
Female	13	60.0	7.74	0.02	.8813
Male	22	62.9	9.34		
Diagnostic (C)					
Schizophrenia	18	62.0	10.56		
Depressive	9	63.6	6.75	0.07	.9299
Miscellaneous	8	59.5	6.46		
		Interactions			
		A x B		**	**
		A x C		0.68	.5145
		B x C		0.00	.9505
		A x B x C		**	**
		Social Self			
Duration					
0-1 year	21	62.5	9.01		
1-2 years	5	67.4	6.35	1.87	.1755
More than 2 years	9	56.1	6.70		

(continued)

Table 1 (continued)

Variable	n	M*	SD	F value	p value
Gender					
Female	13	59.0	6.81	1.06	.3134
Male	22	62.0	9.23		
Diagnostic					
Schizophrenia	18	61.2	9.22		
Depressive	9	61.4	8.62	0.88	.4265
Miscellaneous	8	59.5	7.15		
		Interactions			
		A x B		**	**
		A x C		0.55	.5833
		B x C		1.35	.2561
		A x B x C		**	**
		Physical Self			
Duration (A)					
0-1 year	21	63.3	8.36		
1-2 years	5	56.4	2.97	1.12	.3419
More than 2 years	9	55.0	8.82		
Gender (B)					
Female	13	58.0	10.59	0.89	.3548
Male	22	61.5	7.33		
Diagnostic (C)					
Schizophrenia	18	60.2	10.40		
Depressive	9	62.6	7.95	0.64	.5385
Miscellaneous	8	57.5	4.17		

(continued)

Table 1 (continued)

Variable	n	M*	SD	F value	p value
		Interactions			
		A x B		**	**
		A x C		0.26	.7768
		B x C		1.16	.2919
		A x B x C		**	**
		Family Self			
Duration (A)					
0-1 year	21	61.4	10.22		
1-2 years	5	57.8	7.85	0.48	.6240
More than 2 years	9	54.1	12.55		
Gender (B)					
Female	13	54.2	10.66	1.45	.2405
Male	22	62.9	9.97		
Diagnostic (C)					
Schizophrenia	18	60.0	12.71		
Depressive	9	57.6	10.78	0.10	.9070
Miscellaneous	8	58.4	5.63		
		Interactions			
		A x B		**	**
		A x C		0.03	.9677
		B x C		0.02	.9034
		A x B x C		**	**

(continued)

Table 1 (continued)

Variable	n	M	SD	F value	p value
		Total P Scores			
Duration (A)					
0-1 year	21	307.9	50.36		
1-2 years	5	293.8	33.52	0.51	.6068
More than 2 years	9	284.0	29.11		
Gender (B)					
Female	13	282.1	48.54	0.94	.3411
Male	22	310.2	38.47		
Diagnostic (C)					
Schizophrenia	18	306.2	43.00		
Depressive	9	291.8	60.30	0.24	.7923
Miscellaneous	8	294.1	23.02		
		Interactions			
		A x B		**	**
		A x C		0.01	.9927
		B x C		0.03	.8546
		A x B x C		**	**

* The larger the value, the higher the self concept.
** Sample size too small for this analysis

None of the 50 p-levels was statistically significant at the .05 level; therefore, the null hypotheses for these comparisons were retained. The results cited in Table 1 indicated no associations for any independent and dependent variables.

It was hypothesized in composite null hypothesis number two that the differences among the mean self concept scores according to gender, diagnostic categories and chronological age would not be statistically significant. Table 2 contains variables, sample sizes, means, standard deviations, F values, and probability levels.

Table 2

A Comparison of Mean Self Concept Scores According to Gender, Diagnostic Categories and Chronological Age Employing a Three-Way Analysis of Variance

Variable	n	M	SD	F value	p value
		Physical Self			
Gender (B)					
Female	13	58.0	10.59	2.60	.1191
Male	22	61.2	7.33		
Diagnostic (C)					
Schizophrenia	18	60.2	10.40		
Depressive	9	62.6	7.95	1.49	.2443
Miscellaneous	8	57.6	4.17		
Age (D)					
Less than 32 years	20	60.2	7.53	.27	.6050
Over 33 years	15	60.2	10.35		
		Interaction			
		B x C		.63	.4330
		B x D		**	**
		C x D		.00	.9585
		B x C x D		**	**

(continued)

Table 2 (continued)

Variable	n	M	SD	F value	p value
		Moral-Ethical Self			
Gender (B)					
Female	13	60.0	10.08	.71	.4080
Male	22	63.1	9.67		
Diagnostic (C)					
Schizophrenia	18	63.3	9.14		
Depressive	9	61.6	13.13	.31	.7334
Miscellaneous	8	59.4	7.31		
Age (D)					
Less than 32 years	20	61.00	10.55	.03	.8595
Over 33 years	15	63.2	8.87		
		Interaction			
		B x C		.02	.8981
		B x D		**	**
		C x D		.19	.6673
		B x C x D		**	**
		Personal Self			
Gender (B)					
Female	13	60.00	7.73	1.34	.2577
Male	22	62.91	9.34		
Diagnostic (C)					
Schizophrenia	18	62.0	10.55		
Depressive	9	63.56	6.75	1.23	.3081
Miscellaneous	8	59.50	6.46		

(continued)

Table 2 (continued)

Variable	n	M	SD	F value	p value
Age (D)					
Less than 32 years	20	61.30	8.83	.85	.3647
Over 33 years	15	62.53	8.96		
		Interaction			
		B x C		.01	.9310
		B x D		**	**
		C x D		.15	.7028
		B x C x D		**	**
		Family Self			
Gender (B)					
Female	13	54.15[b]	10.66	6.70	.0156
Male	22	61.86[a]	9.97		
Diagnostic (C)					
Schizophrenia	18	60.00	12.71		
Depressive	9	57.56	10.78	.92	.4110
Miscellaneous	8	58.38	5.63		
Age (D)					
Less than 32 years	20	57.25	9.88	2.69	.1133
Over 33 years	15	61.33	11.77		
		Interaction			
		B x C		.11	.7394
		B x D		**	**
		C x D		.37	.5499
		B x C x D		**	**

(continued)

Table 2 (continued)

Variable	n	M	SD	F value	p value
		Social Self			
Gender (B)					
Female	13	59.00	6.81	2.18	.1521
Male	22	61.96	9.23		
Diagnostic (C)					
Schizophrenia	18	61.17	9.22		
Depressive	9	61.44	8.62	.47	.6278
Miscellaneous	8	59.50	7.15		
Age (D)					
Less than 32 years	20	60.90	9.01	.09	.7632
Over 33 years	15	60.80	7.90		
		Interaction			
		B x C		.88	.3579
		B x D		**	**
		C x D		1.87	.1835
		B x C x D		**	**
		Self-Criticism			
Gender (B)					
Female	13	32.31	4.77	.02	.8830
Male	22	32.96	5.35		
Diagnostic (C)					
Schizophrenia	18	34.44	5.10		
Depressive	9	31.67	4.12	2.02	.1536
Miscellaneous	8	30.00	5.01		

(continued)

Table 2 (continued)

Variable	n	M	SD	F value	p value
Age (D)					
Less than 32 years	20	32.80	5.10	.53	.4726
Over 33 years	15	32.60	5.22		
		Interaction			
		B x C		.07	.7891
		B x D		**	**
		C x D		.61	.4408
		B x C x D		**	**
		Identity			
Gender (B)					
Female	13	97.85[c]	17.94	4.49	.0437
Male	22	109.14[d]	17.53		
Diagnostic (C)					
Schizophrenia	18	107.78	19.33		
Depressive	9	103.89	20.58	.80	.4613
Miscellaneous	8	99.75	13.32		
Age (D)					
Less than 32 years	20	102.35	18.24	1.02	.3222
Over 33 years	15	108.40	18.35		
		Interaction			
		B x C		.00	.9817
		B x D		**	**
		C x D		.69	.4148
		B x C x D		**	**

(continued)

Table 2 (continued)

Variable	n	M	SD	F value	p value
		Self-Satisfaction			
Gender (B)					
Female	13	96.62	9.73	1.80	.1914
Male	22	100.73	10.01		
Diagnostic (C)					
Schizophrenia	18	98.78	11.33		
Depressive	9	99.56	10.49	.74	.4868
Miscellaneous	8	99.75	13.31		
Age (D)					
Less than 32 years	20	99.50	9.05	.49	.4886
Over 33 years	15	98.80	11.39		
		Interaction			
		B x C		.00	.9631
		B x D		**	**
		C x D		.17	.6832
		B x C x D		**	**
		Behavior			
Gender (B)					
Female	13	94.92	13.03	1.87	.1828
Male	22	100.32	16.85		
Diagnostic (C)					
Schizophrenia	18	99.67	18.26		
Depressive	9	98.89	14.65	.53	.5952
Miscellaneous	8	94.63	10.04		

(continued)

Table 2 (continued)

Variable	n	M	SD	F value	p value
Age (D)					
Less than 32 years	20	95.40	16.22	.85	.3639
Over 33 years	15	102.20	14.24		
		Interaction			
		B x C		.06	.8064
		B x D		**	**
		C x D		.53	.4743
		B x C x D		**	**
		Total P			
Gender (B)					
Female	13	282.08[C]	48.55	4.18	.0513
Male	22	310.18[D]	38.47		
Diagnostic (C)					
Schizophrenia	18	306.22	42.99		
Depressive	9	291.78	60.30	.35	.70.65
Miscellaneous	8	294.13	23.02		
Age (D)					
Less than 32 years	20	292.50	47.43	1.98	.1713
Over 33 years	15	309.40	38.37		
		Interaction			
		B x C		.13	.7223
		B x D		**	**
		C x D		.26	.6150
		B x C x D		**	**

* The larger the value, the higher the self concept.

** Sample size too small for this analysis

ab Difference statistically significant at the .05 level according to Bonferonni (Dunn) t-tests for means.

cd Difference statistically significant at the .05 level.

Three of the 50 p-values were statistically significant at the .05 level; therefore, the null hypothesis for these three comparisons were rejected. The three significant p-values were for the main effect gender and the following dependent variables family self, identity and total P scores. The results cited in Table 2 indicated males having higher mean scores for the following dependent variables: family self, identity and total P.

It was hypothesized in composite null hypothesis number three that the differences among the mean self concept scores according to duration of partial hospitalization, gender and chronological age would not be statistically significant. Table 3 contains variables, sample size, means, standard deviations, F values, and probability levels.

Table 3

A Comparison of Mean Self Concept Scores According to Duration of Partial Hospitalization, Gender, and Chronological Age Employing a Three-Way Analysis of Variance

Variable	n	M*	SD	F value	p value
		Physical Self			
Duration (A)					
0-1 year	21	63.3[c]	8.36		
Greater than 1-2 years	5	56.4[d]	2.97	5.35	.0119
Greater than 2 years	9	55.0[d]	8.82		
Gender (B)					
Female	13	58.00	10.59	1.25	.2741
Male	22	61.5	7.33		
Age (D)					
32 years and younger	20	60.2	7.53	2.23	.1487
33 years and older	15	60.2	10.35		
		Interactions			
		A x B		.93	.4096
		A x D		.15	.8599
		B x D		.06	.8145
		A x B x D		.22	.6460

(continued)

Table 3 (continued)

Variable	n	M*	SD	F value	p value
		Moral-Ethical Self			
Duration (A)					
0-1 year	21	64.05	10.27		
Greater than 1-2 years	9	56.40	13.03	1.43	.2589
Greater than 2 years	5	60.11	4.93		
Gender (B)					
Female	13	60.00	10.08	.01	.9166
Male	22	63.09	9.67		
Age (D)					
32 years and younger	20	61.0	10.55	1.30	.2663
33 years and older	15	63.20	8.87		
		Interactions			
		A x B		1.05	.3652
		A x D		.>>	.4738
		B x D		2.85	.1044
		A x B x D		2.36	.1373
		Personal Self			
Duration (A)					
0-1 year	21	64.19[c]	8.38		
Greater than 1-2 years	5	61.00[d]	7.58	5.38	.0117
Greater than 2 years	9	56.78[d]	8.93		
Gender (B)					
Female	13	60.00	7.73	3.13	.0894
Male	22	62.91	9.34		

(continued)

Table 3 (continued)

Variable	n	M*	SD	F value	p value
Age (D)					
32 years and younger	20	61.30	8.83	3.71	.0659
33 years and older	15	62.53	8.96		
		Interactions			
		A x B		1.17	.3288
		A x D		.33	.7207
		B x D		.70	.4105
		A x B x D		.54	.4709
		Family Self			
Duration (A)					
0-1 year	21	61.38[c]	10.22		
Greater than 1-2 years	5	57.80[d]	7.85	5.61	.0100
Greater than 2 years	9	54.11[d]	12.55		
Gender (B)					
Female	13	54.15	10.66	3.47	.0749
Male	22	61.86	9.97		
Age (D)					
32 years and younger	20	57.25[c]	9.88	9.76	.0046
33 years and older	15	61.33[d]	11.77		
		Interactions			
		A x B		.13	.8768
		A x D		.40	.6737
		B x D		.01	.9430
		A x B x D		1.68	.2067

(continued)

Table 3 (continued)

Variable	n	M*	SD	F value	p value
		Social Self			
Duration (A)					
0-1 year	21	62.52	9.01		
Greater than 1-2 years	5	62.40	6.35	1.51	.2401
Greater than 2 years	9	56.11	6.70		
Gender (B)					
Female	13	59.00	6.81	1.17	.2900
Male	22	61.96	9.23		
Age (D)					
32 years and younger	20	60.90	9.01	.79	.3815
33 years and older	15	60.80	7.90		
		Interactions			
		A x B		.05	.9555
		A x D		.06	.9414
		B x D		.22	.6421
		A x B x D		.04	.8361
		Self-Criticism			
Duration (A)					
0-1 year	21	31.62	5.02		
Greater than 1-2 years	5	32.80	4.60	.99	.3856
Greater than 2 years	9	35.22	5.07		
Gender (B)					
Female	13	32.96	4.77	.00	.9476
Male	22	32.31	5.35		

(continued)

Table 3 (continued)

Variable	n	M*	SD	F value	p value
Age (D)					
32 years and younger	20	32.80	5.10	1.18	.2877
33 years and older	15	32.60	5.22		
		Interactions			
		A x B		.49	.6214
		A x D		.67	.5190
		B x D		1.69	.2065
		A x B x D		.02	.8895
		Identity			
Duration (A)					
0-1 year	21	108.29	19.64		
Greater than 1-2 years	5	101.60	14.64	1.91	.1697
Greater than 2 years	9	99.00	16.48		
Gender (B)					
Female	13	97.85	17.94	1.94	.1759
Male	22	109.14	17.53		
Age (D)					
32 years and younger	20	102.35	18.24	2.96	.0984
33 years and older	15	108.40	18.35		
		Interactions			
		A x B		.03	.9693
		A x D		.07	.9293
		B x D		.26	.6135
		A x B x D		.56	.4624

(continued)

Table 3 (continued)

Variable	n	M*	SD	F value	p value
		Self-Satisfaction			
Duration (A)					
0-1 year	21	102.38[c]	8.81		
Greater than 1-2 years	5	96.60[d]	8.05	3.36	.0515
Greater than 2 years	9	93.22[d]	11.17		
Gender (B)					
Female	13	96.62	9.73	1.37	.2537
Male	22	100.73	10.01		
Age (D)					
32 years and younger	20	99.50	9.05	1.85	.1862
33 years and older	15	98.80	11.39		
		Interactions			
		A x B		.62	.5455
		A x D		.01	.9867
		B x D		.07	.7876
		A x B x D		1.29	.2667
		Behavior			
Duration (A)					
0-1 year	21	101.76[c]	16.75		
Greater than 1-2 years	5	95.60[d]	13.13	3.57	.0439
Greater than 2 years	9	91.78[d]	12.57		
Gender (B)					
Female	13	94.92	13.03	.97	.3355
Male	22	100.32	16.85		

(continued)

Table 3 (continued)

Variable	n	M*	SD	F value	p value
Age (D)					
32 years and younger	20	95.40	16.22	6.12	.0208
33 years and older	15	102.20	14.24		
		Interactions			
		A x B		.19	.8306
		A x D		.03	.9678
		B x D		1.33	.2606
		A x B x D		1.24	.2769
		Total P			
Duration (A)					
0-1 year	21	307.90	50.36		
Greater than 1-2 years	5	293.80	33.52	2.53	.1010
Greater than 2 years	9	284.00	29.11		
Gender (B)					
Female	13	282.08	48.55	2.14	.1563
Male	22	310.18	38.47		
Age (D)					
32 years and younger	20	292.50	47.43	4.59	.0426
33 years and older	15	309.40	38.37		
		Interactions			
		A x B		.01	.9939
		A x D		.06	.9404
		B x D		.12	.7291
		A x B x D		.142	.2454

* The larger the value, the higher the self concept.
** Sample size to small for this analysis.
cd Difference statistically significant at the .05 level.

Three of the 70 p-values were statistically significant at the .05 level; therefore, the null hypotheses pertaining to these comparisons were rejected. The six significant p-values were for the main effects duration and physical self, personal self, family self, behavior and age for family self. The results cited in Table 3 indicated the following for the Independent Variable duration: those individuals who had been in the program 0-1 year had higher mean scores for physical self, personal self, family self and behavior. The results also indicated individuals 33 years of age and older reported a higher mean family self score than younger individuals.

It was hypothesized in composite null hypothesis number four that the differences among the mean self concept scores according to duration of partial hospitalization, diagnostic categories and chronological age would not be statistically significant. Table 4 contains variables, sample sizes, means, standard deviations, F values, and probability levels.

Table 4

A Comparison of Mean Self Concept Scores According to Duration of Partial Hospitalization, Diagnostic Categories and Chronological Age Employing a Three-Way Analysis of Variance

Variable	n	M*	SD	F value	p value
		Physical Self			
Duration (A)					
0-1 year	21	63.3	8.36		
Greater than 1-2 years	5	56.4	2.97	2.88	.0775
Greater than 2 years	9	55.0	8.82		
Diagnostic (C)					
Schizophrenia	18	62.2	10.40		
Depressive	9	62.5	7.95	.27	.7678
Miscellaneous	8	57.5	4.17		
Age (D)					
32 years and younger	20	60.2	7.53	1.43	.2443
33 years and older	15	60.2	10.35		
		Interactions			
		A x C		.19	.9017
		A x D		.00	.9989
		C x D		.22	.8024
		A x C x D		**	**

(continued)

Table 4 (continued)

Variable	n	M*	SD	F value	p value
		Moral Ethical Self			
Duration (A)					
0-1 year	21	64.05	10.27		
Greater than 1-2 years	9	56.40	13.03	1.98	.1614
Greater than 2 years	5	60.11	4.93		
Diagnostic (C)					
Schizophrenia	18	63.28	9.14		
Depressive	9	61.56	13.13	1.05	.3653
Miscellaneous	8	59.38	7.31		
Age (D)					
32 years and younger	20	61.00	10.55	3.50	.0747
33 years and older	15	63.20	8.87		
		Interactions			
		A x C		.96	.4306
		A x D		1.16	.3314
		B x D		.09	.9099
		A x C x D		**	**
		Personal Self			
Duration (A)					
0-1 year	21	64.19	8.38		
Greater than 1-2 years	5	61.00	7.58	2.60	.0973
Greater than 2 years	9	56.78	8.39		

(continued)

Table 4 (continued)

Variable	n	M*	SD	F value	p value
Diagnostic (C)					
Schizophrenia	18	62.00	10.55		
Depressive	9	63.56	6.75	.84	.4441
Miscellaneous	8	59.50	6.46		
Age (D)					
32 years and younger	20	61.30	8.83	3.55	.0729
33 years and older	15	62.53	8.96		
		Interactions			
		A x C		.77	.5252
		A x D		.24	.7922
		B x D		.01	.9910
		A x C x D		**	**
		Family Self			
Duration (A)					
0-1 year	21	61.38	10.22		
Greater than 1-2 years	5	57.80	7.85	3.21	.0600
Greater than 2 years	9	54.11	12.55		
Diagnostic (C)					
Schizophrenia	18	60.00	12.71		
Depressive	9	57.57	10.78	.90	.4214
Miscellaneous	8	58.38	5.63		
Age (D)					
32 years and younger	20	57.25[c]	9.88	5.67	.0263
33 years and older	15	61.33[d]	11.77		

(continued)

Table 4 (continued)

		Interactions			
		A x C		.23	.8764
		A x D		.49	.6178
		B x D		.34	.7158
		A x C x D		**	**
		Social Self			
Duration (A)					
0-1 year	21	62.52	9.01		
Greater than 1-2 years	5	62.40	6.35	1.45	.2560
Greater than 2 years	9	56.11	6.70		
Diagnostic (C)					
Schizophrenia	18	61.17	9.22		
Depressive	9	61.44	8.62	.82	.4533
Miscellaneous	8	59.50	7.15		
Age (D)					
32 years and younger	20	60.90	9.01	.43	.5194
33 years and older	15	60.80	7.90		
		Interactions			
		A x C		.01	.9976
		A x D		.16	.8519
		B x D		.30	.7431
		A x C x D		**	**
		Self Criticism			
Duration (A)					
0-1 year	21	31.62	5.02		
Greater than 1-2 years	5	32.80	4.60	.58	.5707
Greater than 2 years	9	35.22	5.07		

(continued)

Table 4 (continued)

Variable	n	M*	SD	F value	p value
Diagnostic (C)					
Schizophrenia	18	34.44	5.10		
Depressive	9	31.67	4.12	2.15	.1405
Miscellaneous	8	30.00	5.01		
Age (D)					
32 years and younger	20	32.80	5.10	1.67	.2092
33 years and older	15	32.60	5.22		
		Interactions			
		A x C		.12	.9471
		A x D		.42	.6624
		B x D		.86	.4369
		A x C x D		**	**
		Identity			
Duration (A)					
0-1 year	21	108.29	19.64		
Greater than 1-2 years	5	101.60	14.64	1.84	.1818
Greater than 2 years	9	99.00	16.48		
Diagnostic (C)					
Schizophrenia	18	107.78	19.33		
Depressive	9	103.89	20.58	.84	.4451
Miscellaneous	8	99.75	13.32		
Age (D)					
32 years and younger	20	102.35	18.24	2.35	.1394
33 years and older	15	108.40	18.35		

(continued)

Table 4 (continued)

Variable	n	M*	SD	F value	p value
		Interactions			
		A x C		.11	.9553
		A x D		.10	.9024
		B x D		.02	.9791
		A x C x D		**	**
		Self-Satisfaction			
Duration (A)					
0-1 year	21	102.38	8.81		
Greater than 1-2 years	5	96.60	8.05	1.91	.1724
Greater than 2 years	9	93.22	11.17		
Diagnostic (C)					
Schizophrenia	18	98.78	11.33		
Depressive	9	99.56	10.49	.51	.6070
Miscellaneous	8	99.75	13.31		
Age (D)					
32 years and younger	20	99.50	9.05		
				1.42	.2465
33 years and older	15	98.80	11.39		
		Interactions			
		A x C		1.04	.3933
		A x D		.24	.7916
		B x D		1.09	.3543
		A x C x D		**	**

(continued)

Table 4 (continued)

Variable	n	M*	SD	F value	p value
		Behavior			
Duration (A)					
0-1 year	21	101.76[c]	16.75		
Greater than 1-2 years	5	95.60[b]	13.13	3.62	.0436
Greater than 2 years	9	91.78[d]	12.57		
Diagnostic (C)					
Schizophrenia	18	99.67	18.26		
Depressive	9	98.89	14.65	1.07	.3609
Miscellaneous	8	94.63	10.04		
Age (D)					
32 years and younger	20	95.40[c]	16.22	6.70	.0168
33 years and older	15	102.20[d]	14.24		
		Interactions			
		A x C		.35	.7891
		A x D		.26	.7708
		B x D		.06	.9465
		A x C x D		**	**
		Total			
Duration (A)					
0-1 year	21	307.90	50.36		
Greater than 1-2 years	5	293.80	33.52	2.27	.1274
Greater than 2 years	9	284.00	29.11		

(continued)

Table 4 (continued)

Variable	n	M*	SD	F value	p value
Diagnostic (C)					
Schizophrenia	18	306.22	42.99		
Depressive	9	291.78	60.30	1.06	.3641
Miscellaneous	8	294.13	23.02		
Age (D)					
32 years and younger	20	292.50	47.43	3.78	.0648
33 years and older	15	309.40	38.37		
		Interactions			
		A x C		.22	.8793
		A x D		.11	.8982
		B x D		.17	.8464
		A x C x D		**	**

* The larger the value, the higher the self concept.
** Sample size too small for this analysis.
cd Differences statistically significant at the .05 level.

Three of the 60 p-values were statistically significant at the .05 level; therefore, the null hypotheses pertaining to these three comparisons were rejected. The three significant p-values were for main effects age and family self, behavior and duration for behavior (recurring see Table 3). The results cited in Table 4 indicated individuals 33 years of age and older reported higher mean scores for family self and behavior.

Discussion

Summary

The purpose of the researcher was to investigate the self concepts of individuals diagnosed as chronic mentally ill. The independent variables were duration of partial hospitalization, gender, diagnosis and chronological age. The dependent variables were 10 subscales from the Tennessee Self Concept Scale. The subscales were: (1) physical self, (2) moral-ethical self, (3) personal self, (4) family self, (5) social self, (6) self criticism, (7) identity, (8) self satisfaction, (9) behavior and (10) total P scores. The Tennessee Self Concept Scale was administered to 35 chronic mentally ill individuals at High Plains Mental Health Center. Four composite null hypotheses were tested employing three-way analysis of variance (general linear model). One-hundred comparisons plus 130 reccurring were made. Of the 100 comparisons made, 9 were statistically significant at the .05 level. The 9 statistically significant comparisons were for main effects. The significant main effects were for the independent variables gender with family self, identity, and total P; duration with physical self, personal self, family self, and behavior; and age with family self, and behavior.

Related Literature and Results of the Present Study

The results of the present study supported the

findings reported by Burns, 1979, Harter, 1983 (as cited by Diedrick, 1986), that self esteem was considered an important variable in determining behavior, adjustment and happiness with low self-esteem equating with behavioral problems, maladjustments and unhappiness; Van Der Velde (1985) that a major factor contributing to the development of maladaptive behaviors emanate from distorted images of one's self; and Frey and Carlock (1984) that those with low self esteem experience self-rejection, self-dissatisfaction and self-disparagement. Other findings that the results of the present study supported were from Ciardiello and Bingham (1982) who postulated that the schizophrenic person has severe problems with self esteem; the DSM-III-R (The American Psychiatric Association, 1987) described characteristics of schizophrenic individuals as impaired interpersonal relationships, loss of self-direction and self esteem; Storr (1983) who postulated that the most notable characteristic was absence of an inner source of or base for self esteem.

Generalizations

The results of the present study appear to support the following generalizations:

(1) chronic mentally ill males possess a higher self concept than females for family self, identity and total P;

(2) the shorter the duration of partial hospitalization of the chronic mentally ill individual, the higher the self concept for physical self, personal self, family self and behavior;

(3) chronic mentally ill individual 33 years and older have a higher self concept than those individuals 32 years and younger for family self and behavior; and

(4) diagnostic categories and self concept was not associated for any of the ten dependent variables.

Recommendations

The results of the present study appeared to support the following recommendations:

(1) the study should be replicated employing a larger and broader representation of chronic mentally ill individuals randomly selected from different geographical locations;

(2) the study should be replicated employing subjects from state institutions, small community mental health centers and private mental health centers;

(3) the study should be replicated exploring the diagnostic category (miscellaneous) as separate entities and their effects on chronic mentally ill

individuals; and

(4) the study should be replicated using a different instrument to measure self concept.

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Appendix A

High Plains Mental Health Center Proposal

METHODOLOGY:

Subjects:

50 participants of the partial hospitalization and supportive housing program will be needed.

Independent variables to be studied:

1. Gender:
   2 levels
   - Male
   - Female

2. Diagnosis
   3 levels
   - Schizophrenia
   - Depressive
   - Miscellaneous

3. Duration of Partial Hospitalization
   3 levels
   - 0-1 year
   - 1-2 year
   - 2 years and up

4. The differences between scores obtained on a similar test 3 years ago and the new scores obtained.

Dependent Variables:

1. Tennessee Self Concept Scale (TSCS)
2. Coopersmith Self- Esteem Inventory (SEI)

Written permission by High Plains Mental Health Center is required by Fort Hays State University department of education and counseling in order to administer these two assessments at your facility.

The consent form to be filled out by the subjects at the time of testing is included. If this form does not meet your standards, please include the changes you wish me to make.

Thank you.

Appendix B

High Plains Mental Health Center Administration Letter

April 10, 1989

High Plains Mental Health Administrators,

The following condensed proposal nas been subjected to you for your possible consent for myself to conduct research at High Plains Mental Health Center, enlisting the aid of the participants of your partial hospitalization and supportive housing programs as subjects.

The purpose of this research is to gather data for my thesis project needed in order to fulfill my requirements for my masters degree in counseling.

Thank you for your time, involving this consideration for research. If you need further information please contact me at your convenience.

Sincerely

Steve Nachtigal

310 W. 7 Street
Hays, Ks., 67601
628-8433

Appendix C

Informed Consent Form

INFORMED CONSENT FORM

All individuals who take part in this investigation must sign this consent form. The signing of this form states that you are participating on a voluntary basis.

If any part of this study causes you risk, you are free to end the experiment at any time you wish. No information will be used for group data and no individual can be identified from this data. The purposes of the data collection is for research only.

By signing this form you do not waive any of your legal rights, it simply states that you are volunteering.

Signed_____

Age _____

Date ____/____/____

Appendix D

High Plains Mental Health Center

Approval to Conduct Research

HIGH PLAINS MENTAL HEALTH CENTER

RE: Attached research proposal of Steve Nachtigal

DATE: April 14, 1989

The review committee has read and approved the attached proposal for research by Steve Nachtigal. The proposal is acceptable as stated, with the understanding that High Plains Mental Health Center does not guarantee 50 participants. Also the scores referred to from a similar test, 3 years ago, are not available for all current patients.

A summary of the results is to be provided for the staff.

Researcher _____ _____
Steve Nachtigal Date

Review Committee:

_____ _____
Date

_____

_____

_____